Claims 1-28 remain in the application and have been amended hereby.

As will be noted from the Declaration, Applicant is a citizen and resident of Japan and this application originated there.

Accordingly, the amendments to the specification are made to place the application in idiomatic English, and the claims are amended to place them in better condition for examination.

An early and favorable examination on the merits is earnestly solicited.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE ABSTRACT OF THE DISCLOSURE

The Abstract of the Disclosure has been amended as follows:

--[It is an object of the present invention to provide an] An information-processing apparatus, an information-processing method, and a data recording medium which allow a display [of much interest to the user] to be presented to [the] a user. [With the information-processing] The apparatus, [an information-processing] method, and [a data recording] medium[, it is possible to] allow the display of a cyclical time concept which includes nature, creatures [as well as], and integration of pictures and comments and is based on a predetermined [regularity, wherein a] cycle typically [comprises] including a sequence of transitions among the four seasons[, namely, the] of spring, [the] summer, [the] autumn and [the] winter, or of a day consisting of [a] morning, [a day time] afternoon, and [a] night, or a cycle can also be a temperature or humidity cycle.

[A thumbnail icon is generated to represent raw data read out from storage means for storing the raw data and time-axis data which is associated with the raw data and stored in the storage means by being associated with the raw data. The generated thumbnail icon is then displayed in an array on a virtual spiral which is based on the time-axis data and has a period corresponding to a predetermined unit time.]--

IN THE CLAIMS

Claims 1-28 have been amended as follows:

--1. (Amended) An information-processing apparatus, comprising:

storage means for storing raw data and time-axis data [which is] related to said raw data and stored in said storage means by [being associated] association with said raw data;

thumbnail-icon-generating means for generating a thumbnail icon representing said raw data read [out at] from said storage means;

spiral-period-setting means for setting a spiral period of a virtual spiral [on the basis of] based upon a predetermined unit time;

spiral-axis-setting means for setting a spiral axis of said virtual spiral [on the basis of] based upon said predetermined unit time; and

thumbnail-icon-array-displaying means for displaying said thumbnail icon in an array on said virtual spiral [on the basis of] based upon said time-axis data associated with said raw data represented by said thumbnail icon.

--2. (Amended) [An] The information-processing apparatus according to claim 1, said information-processing apparatus further comprising:

representative-thumbnail-selecting means for selecting [a

specific] one of a plurality of thumbnail icons displayed [as] in said array on said virtual spiral as a representative thumbnail icon; and

representative-thumbnail-icon-array-displaying means for displaying said representative thumbnail icon selected by said representative-thumbnail-selecting means in [an] said array on said virtual spiral.

--3. (Amended) [An] The information-processing apparatus according to claim 1, said information-processing apparatus further comprising:

spiral-layer-synthesizing means for synthesizing a plurality of spiral layers each [comprising] including said virtual spiral, said spiral axis, and said thumbnail [icons] icon; and

synthesized-layer-displaying means for displaying a synthesized layer produced by said spiral-layer-synthesizing means.

--4. (Amended) [An] The information-processing apparatus according to claim 1, further comprising:

thumbnail-icon-extracting means for extracting a specific thumbnail icon from a plurality of thumbnail icons displayed [as] in said array based on said time-axis data [on the basis of] based upon a predetermined [regularity] cycle; and

data-outputting means for outputting said raw data represented by said specific thumbnail icon extracted by said

thumbnail-icon-extracting means.

--5. (Amended) [An] The information-processing apparatus according to claim 1, wherein said unit time corresponding to said spiral [period's unit time] period set by said spiral-period-setting means is one of a month unit and a one-year unit including a spring, a summer, an autumn, and a winter[, or a month unit].

--6. (Amended) [An] The information-processing apparatus according to claim 4, wherein said predetermined [regularity] cycle includes [at least] one of: a [regularity] cycle based on a time axis representing [at least] one of hours, days, months [or], and years[,]; a [regularity] cycle based on [temperatures or] a temperature; and a [regularity] cycle based on humidity data.

--7. (Amended) [An] The information-processing apparatus according to claim [1] 2, wherein said representative-thumbnail-icon-array-displaying means displays said thumbnail icon as a semitransparent display.

--8. (Amended) [An] The information-processing apparatus according to claim [1] 3, further comprising visual-point-moving means for [arbitrarily] moving a visual point of said spiral layer displaying said virtual spiral, said spiral axis, and said thumbnail [icons] icon.

--9. (Amended) [An] The information-processing apparatus according to claim 8, wherein said visual-point-moving means automatically moves said visual point of said spiral layer along a time axis.

--10. (Amended) [An] The information-processing apparatus according to claim 8, wherein said visual-point-moving means one of moves said visual point of said spiral layer [or] by performing visual-point parallel-movement processing and changes [the] a direction of a visual line of said spiral layer [in respectively visual-point parallel-movement processing or] by performing visual-line-direction modification processing [which is], said visual-line-direction modification processing performed in accordance with an operation carried out manually on [an] a predetermined operation key [set in advance] for said visual-point parallel-movement processing [or] and said visual-line-direction modification processing [respectively].

--11. (Amended) [An] The information-processing apparatus according to claim 8, wherein said visual-point-moving means moves said visual point in said visual-point parallel-movement processing in [at least the] a direction of one of an X, Y [or], and Z axis in a displayed virtual space.

--12. (Amended) [An] The information-processing apparatus according to claim 8, wherein said visual-point-moving means moves said visual point in [at least] one of yaw, pitch, and

roll directions in a displayed virtual space.

--13. (Amended) [An] The information-processing apparatus according to claim 10, wherein said visual-point-moving means automatically resets said visual point to [an origin's] a predetermined origin position [set in advance] after [the] a lapse of a predetermined time [since a] from said manual operation to start one of said visual-point parallel-movement processing [or] and said visual-line-direction modification processing.

--14. (Amended) [An] The information-processing apparatus according to claim 10, wherein said visual-point-moving means one of automatically moves said visual point [or] and automatically switches [the] a position of said visual point to [another] an other location after [the] a lapse of a predetermined time [since a] from said manual operation to start one of said visual-point parallel-movement processing [or] and said visual-line-direction modification processing.

--15. (Amended) A computer-graphic-display program storage [medium] method comprising the steps of:

[storage step for] storing raw data and time-axis data [which is] related to said raw data [and stored] in [said] storage means by [being associated] association with said raw data and reading said raw data;

[thumbnail-icon-generating step for] generating a

thumbnail icon representing said raw data read [out at] in said storage step;

[a spiral-period-setting step of] setting a spiral period of a virtual spiral [on the basis of] based upon a predetermined unit time;

[a spiral-axis-setting step of] setting a spiral axis of said virtual spiral [on the basis of] based upon said predetermined unit time; and

[a thumbnail-icon-array-displaying step of] displaying said thumbnail icon in an array on said virtual spiral [on the basis of] based upon said time-axis data associated with said raw data represented by said thumbnail icon.

--16. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim 15, further comprising the steps of:

[a representative-thumbnail-icon-selecting step of] selecting a specific [one] thumbnail icon of a plurality of thumbnail icons displayed [as] in said array on said virtual spiral as a representative thumbnail icon; and

[a representative-thumbnail-icon-array-displaying step of] displaying said representative thumbnail icon selected [at] in said representative-thumbnail-icon-selecting step in [an] said array on said virtual spiral.

--17. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim 15, further

comprising the steps of:

[a spiral-layer-synthesizing step of] synthesizing a plurality of spiral layers each [comprising] including said virtual spiral, said spiral axis, and said thumbnail [icons] icon; and

[a synthesized-layer-displaying step of] displaying [a] one of said plurality of synthesized [layer] layers produced [at] in said spiral-layer- synthesizing step.

--18. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim 15, further comprising the steps of:

[a thumbnail-icon-extracting step of] extracting a specific thumbnail icon from a plurality of thumbnail icons displayed [as] in said array based on said time-axis data [on the basis of] based upon a predetermined [regularity] cycle; and

[a data-outputting step of] outputting said raw data represented by said specific thumbnail icon selected [at] in said thumbnail-icon-extracting step.

--19. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim 15, wherein said unit time corresponding to said spiral [period's unit time] period set by said spiral-period-setting step is one of a month unit and a one-year unit including a spring, a summer, an autumn, and a winter[, or a month unit].

--20. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim 18, wherein said predetermined [regularity] cycle includes [at least] one of: a [regularity] cycle based on a time axis representing [at least] one of hours, days, months [or], and years[,]; a [regularity] cycle based on [temperatures or] a temperature; and a [regularity] cycle based on humidity data.

--21. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim [15] 16, wherein [at] in said representative-thumbnail-icon-array-displaying step[,] said representative thumbnail icon is displayed as a semitransparent display.

--22. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim [15] 17, [said information- processing program] further [comprises] comprising a [visual-point-moving] step of [arbitrarily] moving a visual point of said spiral layer displaying said virtual spiral, said spiral axis, and said thumbnail [icons] icon.

--23. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim 22, wherein said visual-point-moving step automatically moves said visual point of said spiral layer along a time axis.

--24. (Amended) [A] The computer-graphic-display program

storage medium according to claim 22, wherein said visual-point-moving step [moves] performs one of moving said visual point of said spiral layer [or changes the] by performing visual-point parallel-movement processing and changing a direction of a visual line of said spiral layer [in respectively visual-point parallel- movement processing or] by performing visual-line-direction modification processing [which is], said visual-line-direction modification processing performed in accordance with an operation carried out manually on [an] a predetermined operation key [set in advance] for said visual- point parallel-movement processing [or] and said visual-line- direction modification processing [respectively].

--25. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim 22, wherein said visual-point-moving step moves said visual point in said visual-point parallel-movement processing in [at least the] a direction of one of an X, Y [or], and Z axis in a displayed virtual space.

--26. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim 22, wherein said visual-point-moving step moves said visual point in [at least] one of yaw, pitch, and roll directions in a displayed virtual space.

--27. (Amended) [A] The computer-graphic-display program

storage medium according to claim 24, wherein said visual-point-moving step automatically resets said visual point to [an origin's] a predetermined origin position [set in advance] after [the] a lapse of a predetermined time [since a] from said manual operation to start one of said visual-point parallel-movement processing [or] and said visual-line-direction modification processing.

--28. (Amended) [A] The computer-graphic-display program storage [medium] method according to claim 24, wherein said visual-point-moving step automatically [moves] performs one of moving said visual point [or] and automatically [switches the] switching a position of said visual point to [another] an other location after [the] a lapse of a predetermined time [since a] from said manual operation to start one of said visual-point parallel-movement processing [or] and said visual-line-direction modification processing.--